

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) An isolated DNA comprising a nucleotide sequence encoding the following polypeptide (a) or (b):

(a) a polypeptide, consisting of an amino acid sequence identical to the amino acid sequence represented by SEQ ID NO: 2; or

(b) a polypeptide, consisting of an amino acid sequence derived from the amino acid sequence represented by SEQ ID NO: 2 by deletion, substitution, or addition of within one to twenty amino acids and having N-acetylglucosamine transferase activity.

2. (Previously Presented) An isolated DNA (c) or (d) as follows:

(c) a DNA, comprising the nucleotide sequence represented by SEQ ID NO: 1 and containing the nucleotide sequence that encodes the amino acid sequence represented by SEQ ID NO: 2; or

(d) a DNA, hybridizing under stringent condition of 1 x SSC, 0.1% SDS and 37 °C to a DNA consisting of a nucleotide sequence complementary to that of the DNA (c) and encoding a protein having N-acetylglucosamine transferase activity.

3. (Cancelled)

4. (Currently Amended) An expression vector, comprising ~~the DNA of claim 1 or claim 2~~ a DNA comprising a nucleotide sequence encoding the following polypeptide (a), (b), (c) or (d):

(a) a polypeptide, consisting of an amino acid sequence identical to the amino acid sequence represented by SEQ ID NO: 2; or

(b) a polypeptide, consisting of an amino acid sequence derived from the amino acid sequence represented by SEQ ID NO: 2 by deletion, substitution, or addition of within one to twenty amino acids and having N-acetylglucosamine transferase activity

(c) a DNA, comprising the nucleotide sequence represented by SEQ ID NO: 1 and containing the nucleotide sequence that encodes the amino acid sequence represented by SEQ ID NO: 2; or

(d) a DNA, hybridizing under stringent condition of 1 x SSC, 0.1% SDS and 37 °C to a DNA consisting of a nucleotide sequence complementary to that of the DNA (c) and encoding a protein having N-acetylglucosamine transferase activity.

5. (Original) A transformant, comprising the vector of claim 4.

6.-17. (Cancelled)

18. (Currently Amended) An isolated polynucleotide, hybridizing under stringent conditions of 1 x SSC, 0.1% SDS and 37 °C to at least one of: ~~the DNA of claim 1 or 2,~~

a DNA comprising a nucleotide sequence encoding the following polypeptide (a), (b), (c) or (d):

(a) a polypeptide, consisting of an amino acid sequence identical to the amino acid sequence represented by SEQ ID NO: 2; or

(b) a polypeptide, consisting of an amino acid sequence derived from the amino acid sequence represented by SEQ ID NO: 2 by deletion, substitution, or addition of within one to twenty amino acids and having N-acetylglucosamine transferase activity

(c) a DNA, comprising the nucleotide sequence represented by SEQ ID NO: 1 and containing the nucleotide sequence that encodes the amino acid sequence represented by SEQ ID NO: 2; or

(d) a DNA, hybridizing under stringent condition of 1 x SSC, 0.1% SDS and 37 °C to a DNA consisting of a nucleotide sequence complementary to that of the DNA (c) and encoding a protein having N-acetylglucosamine transferase activity,

wherein the DNA comprises:

a DNA encoding the amino acid sequence represented by SEQ ID NO: 3 or 4 and consisting of at least 15 nucleotides.

19. (Previously Presented) The polynucleotide of claim 18, which consists of the nucleotide sequence encoding the amino acid sequence represented by SEQ ID NO: 3 or 4, or which consists of the nucleotide sequence which is complementary to the nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 3 or 4.

20. (Withdrawn) A method for detecting carcinoma using the polynucleotide of claim 18 as a probe, comprising the steps of:

- (a) bringing a test sample into contact with the polynucleotide; and
- (b) detecting whether the polynucleotide and the test sample hybridize.

21. (Previously Presented) A method for producing a protein comprising culturing the transformant according to claim 5 and inducing expression of the DNA.